History of cooperation between ISS and MWM

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The position of German business in the Urals is historically strong. The country retains its status of one of the main partners of the region, developing cooperation in various industries. Speaking about the successful experience of cooperation in the energy sector, experts most often cite the example of the technological collaboration between the Urals Group of Companies MKS and the German brand MWM. For about 10 years the companies have been implementing innovative energy projects in the field of distributed generation, helping the Urals business to save on energy resources.

The cooperation of the MKS Group of Companies with MWM - a German brand with a 150-year history, one of the world's leading manufacturers of cogeneration units for autonomous power supply - began in 2011. It was then that the Ural engineering company, which had already worked with the Russian brand YaMZ, Slovak Elteco, Czech Tedom, made a decision that largely determined the further development of the company: to use MWM gas piston engines - high-tech energy equipment of premium class - in the construction of autonomous power centers.



Energy Center for NLMK-Ural

"MWM equipment is a symbol of quality, reliability and environmental friendliness all over the world. At first, when comparing the prices of MWM equipment with those of other suppliers, we all looked back at its higher investment cost. However, the market is maturing, and now customers pay more and more attention to the reliability of power centers. And the practice of that time proved that constant downtime of power plants based on other equipment cost companies more than the initial cost of high-tech equipment. As a result, we started to use MWM gas piston engines in our projects, having appreciated not only the highest quality of the equipment of this brand, but also the impeccable organization of the German plant" says Maxim Zagornov, Director of the MKS Group of Companies.



MKS Group employee measures the temperature of the MWM engine exhaust gas line using a thermal imager

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Long-term cooperation between MKS Group and MWM is not only the history of implementation of dozens of innovative energy projects for various enterprises of Chelyabinsk, Sverdlovsk and Tyumen regions, but also the history of formation of the small-scale distributed power generation industry in the Urals. Only for less than 10 years, MKS Group has built more than 50 autonomous power centers with a total capacity of 244 MW, bringing the Urals into the leading regions in terms of distributed generation development. In 2017, MKS Group - the only one in the Urals and the third in Russia - received the status of an official distributor and service partner of MWM.

"We were among the last in the country to receive this status. But in a short period of time we took a leading position in the MWM distribution network, having established our own service department and new production sites. We mastered small-scale production of power centers in block-modular design, which allowed us to launch facilities in record time. MWM appreciated the advantages of cooperation with us: we build turnkey power centers, fully providing the facilities with service and warranty support. This partnership benefits both parties, but most importantly - our customers,"



visualization in architectural layout of 4.5 MW block-module station

One of the latest striking examples of the technological collaboration between ISS and MWM was the launch in November 2019 of a power center for the region's largest enterprise - NLMK Urals (part of NLMK Group) in Nizhniye Sergi, Sverdlovsk region. The total thermal capacity of the facility amounted to 25.5 MW, electric capacity - 4.5 MW. MWM - TCG 2032V V16 4.5 MW gas piston unit was used as the main equipment, as well as three 7 MW hot water boilers. The new facility fully supplied the company with heat, as well as 50% of its electrical energy. In addition, the environmentally friendly power plant reduced the company's greenhouse gas emissions by 4,000 tons per year.

Among the Urals companies that chose the MKS - MWM tandem are the leading enterprises of the region: PJSC Yuzhuralzoloto Group of Companies, CJSC Tander (Magnit retail chain), LLC Resurs, LLC RIF Micromar, and many others.



energy center produced by MKS Group for NLMK Revda plant

power center produced by MKS Group for NLMK Revda plant
Only for the last 10 years MWM has commissioned more than 800 MW of capacity in
Russia, taking 30% of the market share and becoming one of the leaders in import of
gas engines in the range of 1-5 MW. MWM actively supports the development of the
Russian business and strengthens cooperation with its Russian distributors. Such
cooperation allows launching new production sites and creating high-tech jobs.

In 2020, MKS Group began construction of a power plant manufacturing plant in the Chelyabinsk Region, becoming a resident of the Malaya Sosnovka Industrial Park. At its new production site, the company will develop and manufacture block-modular and unit equipment for autonomous gas piston power plants based on MWM engines. This means that the history of cooperation between the leading engineering enterprise of the Urals - MKS Group of Companies - and the German brand MWM will continue.

Material from the **Expert-Ural website**.

MKS Group of Companies is an engineering enterprise, the main activity of which is turnkey construction of energy facilities. The company designs, builds and operates gas piston power plants (mini-HPPs). It holds leading positions in the small-scale distributed power generation industry in Russia. Over 15 years it has commissioned 54

mini-HPPPs with a total capacity of 244 MW. Since 2017 it has been an official distributor and service partner of MWM, currently occupying a leading position in the distribution network of this brand.

MWM is one of the leading brands in the field of cogeneration plants for autonomous power supply. Since 2011 it has been a part of Caterpillar Energy Solutions Corporation. The history of MWM begins in 1871 and is inextricably linked with the names of its founders - Karl Benz and August Ritter. Efficiency and reliability are the main characteristics of MWM gas piston engines. In Russia, with a total installed capacity of 800 MW and a market share of about 30%, MWM is one of the leading and most successful importers of gas engines in the power range from 1 to 5 MW.